

EXHIBIT A

**VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011**

1

1 IN THE UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF MASSACHUSETTS

3 ABBOTT GMBH & CO., KG, :

4 ABBOTT BIORESEARCH CENTER, INC. :

5 AND ABBOTT BIOTECHNOLOGY LTD., :

6 Plaintiffs :

7 v. : Civil Action No.

8 CENTOCOR ORTHO BIOTECH, INC. : 4:09-CV-11340-FDS

9 AND CENTOCOR BIOLOGICS, LLC :

10 Defendants :

11 -----

12 Videotaped Deposition of THOMAS CLINTON NESSPOR, Ph.D.

13 Philadelphia, Pennsylvania

14 Friday, February 11, 2011

15 9:43 a.m.

16 Job No.: 1-193913

17 Pages: 1 - 142

18 Reported By: Dawn M. Hart, Notary Public, RPR/RMR

19 Videographer: David Lane

20

21

22

Merrill LAD

(202)861-3410 (800)292-4789 (301)762-8282 (703)288-0026

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

106

1 A I'm sorry, it must be the time of day. I'm
2 going to have to ask you to repeat the question.

3 Q Sure. So just reading the figure legend for
4 Figure 2, the first sentence, does it state, the top
5 portion shows a comparison of the 12B75 heavy chain
6 variable region sequence to the DP-73 germline
7 variable region sequence?

8 A Yes, that's what's stated.

9 Q And this comparison of the 12B75 sequence to
10 the DP-73 sequence, how was that comparison performed?

11 MS. JOHNSON: Objection, vague.

12 A I believe it was performed using a computer
13 program which aligns amino acid sequences based on
14 their similarity.

15 Q Okay. And someone would have input the
16 12B75 sequence into this computer program; is that
17 correct?

18 A I'd like to ask you to be more precise about
19 what you mean by input.

20 Q Sure. Actually, strike that question.

21 This computer program -- so is it correct
22 that a computer program was used to compare the 12B75

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

107

1 amino acid sequence to this DP-73 germline sequence?

2 MS. JOHNSON: Objection, vague.

3 A I do believe that to be the case.

4 Q Did you perform that comparison using the
5 computer program?

6 A I can't recall.

7 Q Do you recall if Bernard Scallan performed
8 that comparison of the 12B75 germline sequence to the
9 DP-73 sequence?

10 A No, it was definitely one of the two of us.

11 Q One of the two, either you or Bernard
12 Scallan?

13 A That's correct.

14 Q So if we look at the 12B75 amino acid
15 sequence shown here, can you explain to me what is
16 represented by these various dots and letters?

17 A Yes, I can. The germline sequence is given
18 on the top next to where it says 12B75. Anywhere that
19 the 12B75 amino acid matched the germline sequence in
20 that position, a dot was shown signifying that it was
21 the same amino acid. Anywhere that there was a
22 difference between the germline sequence and the

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

108

1 sequence of 12B75, the difference that -- the amino
2 acid that differed was shown.

3 Q Okay. So the letters shown in bold for
4 12B75 represent amino acids that are different from
5 the DP-73 germline sequence; is that right?

6 A Yes, that's correct.

7 Q And what do these -- how did these
8 differences -- strike that.

9 What was the significance of these
10 differences to you between the sequence of 12B75 and
11 the germline DP-73 sequence?

12 MS. JOHNSON: Objection, form.

13 A I am going to have to ask you to be a little
14 more specific --

15 Q Sure.

16 A -- when you refer to significance.

17 Q Let me strike that previous question.

18 Did you expect to see differences between
19 the 12B75 sequence and the DP-73 germline sequence?

20 MS. JOHNSON: Objection, form.

21 A Yes, we expected to see differences.

22 Q Why did you expect to see differences?

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

109

1 MS. JOHNSON: Same objection.

2 A Antibodies which have gone through the
3 process of affinity maturation to bind to a specific
4 antigen, part of that affinity maturation involves the
5 mutation of amino acids to be different than the
6 germline sequence.

7 Q Okay. And this affinity maturation process
8 that you mentioned, that's something that happens
9 inside, inside the mice?

10 A Yes, that is a process that happens inside
11 the mice.

12 Q And what do you mean by affinity maturation?

13 A It's been a long time since Biology 101 but
14 the, in the process of -- in the process of an
15 antibody gaining its specificity to an antigen, it
16 goes through a specific process called affinity
17 maturation to allow it to bind strongly to the antigen
18 inside -- in vivo in this animal.

19 Q And this affinity maturation, does this
20 involve mutations in the antibody sequence?

21 A I don't feel I can answer specific questions
22 about affinity maturation. I'm just not familiar

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

110

1 enough with the concept.

2 Q Are you familiar with the concept of somatic
3 mutation?

4 A I wish I could say yes but I'm going to say
5 that I couldn't tell you exactly what's meant by
6 somatic mutation at this time.

7 Q Okay. So you mentioned that these
8 differences between the 12B75 amino acid sequence and
9 the DP-73 germline sequence were expected; is that
10 correct? Not -- let me rephrase that.

11 That you expected to see some differences
12 between the 12B75 amino acid sequence and the DP-73
13 germline sequence?

14 MS. JOHNSON: Objection, vague.

15 A Yes.

16 Q And you mentioned that this, the, these
17 differences in the amino acid sequence of 12B75
18 compared to the DP-73 germline sequence were
19 associated with affinity maturation; is that correct?

20 MS. JOHNSON: Objection, form.

21 A That's my understanding.

22 Q And does the affinity maturation result in

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

111

1 generation of antibodies with higher affinity than the
2 starting antibody?

3 MS. JOHNSON: Objection, calls for expert
4 testimony.

5 A I'm going to say that I don't have the
6 knowledge to, to accurately answer that question.

7 Q Okay. So this figure illustrates, as we've
8 discussed already, the sequence, a sequence comparison
9 of the 12B75 heavy chain sequence to the DP-73
10 germline sequence. Do you know why you compared this
11 12B75 sequence to DP-73 in particular as opposed to
12 any of the other germline variable sequences?

13 A My recollection is that we compared the
14 12B75 heavy chain variable region sequence to all of
15 the germline sequences that we were aware of in the
16 GenPharm mice, and that the DP-73 germline sequence
17 was, had the greatest homology to the 12B75 sequence.

18 Q And what did that indicate to you?

19 MS. JOHNSON: Objection, form.

20 A I guess I don't understand the question.

21 Q Did that indicate to you that the 12B75
22 antibody was likely derived from the DP-73 germline

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

112

1 sequence?

2 MS. JOHNSON: Objection, form.

3 A Yes.

4 Q Okay. Did you consider comparing the 12B75
5 sequence to any other germline sequences other than
6 the germline sequences of the GenPharm mice?

7 A No.

8 Q If you could turn to Figure 3 on the next
9 page which is Page 14 of the Technical Report and this
10 is ending in Bates No. 14913.

11 A (Complying.)

12 Q If you could just take a look at Figure 3
13 and the legend for that and let me know when you've
14 reviewed that.

15 A (Reviewing.)

16 I'm sorry, did you ask me to read that?

17 Q If you could just take a look at the legend
18 for Figure 3 and Figure 3, and let me know when you're
19 done.

20 A (Reviewing.)

21 I'm done.

22 Q So this figure also demonstrates a

VIDEOTAPED DEPOSITION OF THOMAS CLINTON NESSPOR, PH.D.
CONDUCTED ON FRIDAY, FEBRUARY 11, 2011

113

1 comparison of the 12B75 sequence to a germline
2 sequence; is that correct?

3 MS. JOHNSON: Objection, form.

4 A Yes.

5 Q And how does this differ from what's shown
6 in Figure 2?

7 A This is the light chain amino acid sequence
8 compared to a light chain germline sequence, and
9 Figure 2 was a heavy chain amino acid sequence
10 compared to a heavy chain germline sequence.

11 Q Okay. And what was the germline sequence
12 that was used for comparison in this figure, Figure 3?

13 A According to the legend this sequence was
14 designated DPK7/HK134/HK166.

15 Q And what is that sequence? What is
16 DPK7/HK134/HK166?

17 A I don't recall what that long designation
18 specifically refers to.

19 Q Okay. Is it a germline sequence of a light
20 chain from the GenPharm mice?

21 A Yes, I believe that to be the case.

22 Q And the figure, if you could look again at